

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-29 are pending in the present application, claims 1, 11, 14, 15, and 19 being independent. Claim 5 has been canceled and claims 1-4, 6-27 have been amended.

Drawings

The Examiner has failed to indicate acceptance or objection to the submitted drawings. Applicants request acceptance of the submitted drawings.

Foreign Priority

Applicants appreciate the Examiner's acknowledgement of foreign priority however the Examiner has incorrectly acknowledged the wrong application. In our 25 July 2000 submission to the Examiner (Japanese Language Declaration and Power of Attorney, pg.2), the Applicants have declared JP 2000-044511, 22 February 2000 as the claimed priority document. Therefore Applicants request that the Examiner acknowledge JP 2000-044511 as the Applicant's submission of priority under 35 U.S.C. § 119(a)-(d).

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 13, 20, and 21 stand rejected under 35 U.S.C. § 112-second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. This rejection is respectfully traversed.

Applicants direct the Examiner's attention to amended claim 13 where "a two-sided reflecting surface on one surface" has been replaced by "a two-sided reflective coating on one surface of said reflecting mirror." Amended claim 13 clearly states the intended scope of claim 13.

Applicants further direct the Examiner's attention to page 36 (Figure 24) of the specification where the elimination of the ridge (ridge line) of a prism is

disclosed, making the Examiner's objection to the elimination of the ridge not being supported by the specification, moot.

Applicants note that a rejection based on vague and indefinite claim language is proper when the scope of a claim is unclear so that the public cannot determine the boundaries of what constitutes infringement of the patent. M.P.E.P. § 2173. Citing In re Wiggins, 448 F.2d 538 (CCPA 1973), the M.P.E.P. states that "if the scope of the invention sought to be patented cannot be determined from the language of the claims with a reasonable degree of certainty, a rejection of claims under 35 U.S.C. § 112, second paragraph is appropriate." M.P.E.P. § 2173.02. Claim definiteness must be analyzed in light of (1) the disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one having ordinary skill in the art. M.P.E.P. § 2173.02.

In view of the above, applicants respectfully request reconsideration and withdrawal of the outstanding rejections under 35 U.S.C. § 112-second paragraph.

Prior Art Rejections

1. Rejection under 35 U.S.C. § 102 (b) based on *Sasser*.

Claim 19 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Sasser* (U.S. Patent No. 4,677,639). This rejection is respectfully traversed.

Claim 19 is directed to a self-compensating laser resonator having a first and second prism and a two-sided reflecting surface. The two-sided reflecting surface is positioned on the second prism where the laser beam is incident. A first and second ridge line of the first and second prisms respectively are substantially orthogonal. The reflective order of the laser beam off of the reflective surfaces, expressed as numbers, is 1-2-3-4-2-1-9-14-3-2-1-3-4-9-4-3.

Sasser describes a laser resonator having two Porro prisms 172 and 173 (Figure 10) aligned such that their respective ridge lines are parallel (col. 11, ll. 44-50; col. 12, ll. 10-20). *Sasser* further describes a system using two corner prisms 124 and 125 (Figure 9; col. 9, ll. 52-53). The ridge lines of the corner prisms are not substantially orthogonal (Figure 9). The reflective order of the

laser beam off of the reflecting surfaces, expressed as numbers, shown in *Sasser* is 1-2-3-4-5-6.

An element of claim 19 is that the ridge lines, defined as the intersection of the reflecting surfaces, of the prisms be substantially orthogonal and result in the reflective order discussed above. As can be clearly seen in Figures 9 and 10 of *Sasser* the ridge lines of the two prisms shown are not substantially orthogonal and fails to result in the reflective order of the present invention defined by claim 19. Therefore, *Sasser* fails to show, teach, or suggest the limitations of claim 19.

For anticipation under 35 U.S.C. § 102 "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)(M.P.E.P. 2131).

In view of the above, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection under 35 U.S.C. § 102 based on *Sasser*.

2. Rejection under 35 U.S.C. § 103 (a) based on *Du et al.* in view of *Nicholson*

Claims 1, 2, 10, 16, 17, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Du et al.* (U.S. Patent 5,148,443) in view of *Nicholson* (U.S. Patent 4,910,746). This rejection is respectfully traversed.

As set forth on page 6 of the Office action the Examiner refers to Figure 1 of *Du* to show a laser resonator where a first ridge (ridge line) and a second ridge (ridge line) are substantially orthogonal to each other.

The invention defined by independent claim 1 has a first and a second ridge line that are substantially orthogonal to each other. In addition the reflection order of the laser beam off of the reflective surfaces, expressed as numbers, is 1-2-3-4-2-1-4-3.

Figure 1 of *Du* clearly shows a top view of a laser reflecting between two optical elements, where the optical elements have associated ridge lines that are parallel (into the page) and fails to show a reflection order off of the reflecting surfaces that is the same as discussed above for claim 1. Figure 3a of *Du* shows

the use of optical elements having ridge lines substantially orthogonal but the order of reflection is also not the same as in claim 1. *Nicholson* fails to show optical elements with substantially orthogonal ridge lines having the reflection order discussed above for claim 1. Hence *Du* in view of *Nicholson* fails to show, teach, or suggest modifying *Du* to arrive at the invention defined by independent claim 1.

To establish a *prima facie* case obviousness under 35 U.S.C. § 103, the Examiner has the burden of meeting the following three basic criteria: (1) the prior art must teach or suggest all of the claim limitations; (2) there must be a reasonable expectation of success; and (3) there must be some suggestion or motivation, either in the art or knowledge generally available to one of ordinary skill in the art to modify the reference or to combine teachings (M.P.E.P. § 2143)(emphasis added).

Since claims 2, 10, 16, 17, 18, and 20 each depend directly or indirectly from independent claim 1, and *Du* in view of *Nicholson* fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 in regards to independent claim 1, *Du* in view of *Nicholson* likewise fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 for dependent claims 2, 10, 16, 17, 18, and 20 for the same reasons as for independent claim 1.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection of claims 1, 2, 10, 16, 17, 18, and 20 under 35 U.S.C § 103(a).

3. Rejection under 35 U.S.C. § 103 (a) based on *Du et al.* + *Nicholson* + *Zare et al.*

Claims 4-9, and 22-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Du* in view of *Nicholson* and further in view of *Zare et al.* (U.S. Patent 6,084,682). This rejection is respectfully traversed.

As discussed above, *Du* in view of *Nicholson* fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 in regards to independent claim 1. *Zare* is used by the Examiner to show a laser resonator that allows portions of P-

polarization and S-Polarization to be reflected or passed. There is no need to address this claim by the Examiner and Applicants does not admit that Zare shows a system that allows to pass portions of P and S polarization. The missing elements of *Du* in view of *Nicholson*, to show, teach, or suggest all elements of independent claim 1, are clearly not shown in *Zare*, since *Zare* fails to show any optical reflective elements with substantially orthogonal ridge lines resulting in the reflection order of claim 1. Since claims 4-9, and 22-27 each depend directly or indirectly from independent claim 1, and *Du* in view of *Nicholson* and further in view of *Zare* fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 in regards to independent claim 1, *Du* in view of *Nicholson* and further in view of *Zare* likewise fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 for dependent claims 4-9, and 22-27 for the same reasons as for independent claim 1.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection of claims 4-9, and 22-27 under 35 U.S.C. § 103(a).

4. Rejection under 35 U.S.C. § 103 (a) based on *Du et al.* in view of *Sasser*

Claims 11, 12, 13, 14, 15, 28, and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Du* in view of *Sasser*. This rejection is respectfully traversed.

Claims 11, 14, and 15 are independent claims and claims 12, 13, 28, and 29 are dependent directly or indirectly from claim 11.

Independent claims 11, 14, and 15 contain first and second reflecting apparatus's that have ridge lines substantially orthogonal. Claim 11 further contains a third reflecting apparatus having parallel reflective surfaces, positioned between the first and second reflecting apparatus resulting in a reflection of a laser beam in the reflection order off of the reflecting surfaces, expressed as numbers, of 1-2-3-4-5-4-3-2-1-3-4-1-2-6-2-1-4-3. Claims 14 further contains a two sided reflecting surface ("seventh" reflecting surface) position near the laser medium such that the reflection order of the laser beam off of the

reflective surfaces, expressed as numbers, is 1-2-3-4-2-1-4-3-7-3-4-1-2-4-3-2-1. Claim 15 further contains a two-sided reflective optical element ("eighth") positioned so that the beam reflective order of the laser beam off of reflective surfaces, expressed as numbers is 1-2-3-4-8 and back again in reverse order 4-3-2-1, then 3-4-1-2-8-2-1-4-3.

As discussed above *Du* and *Sasser* fail to show a laser resonator containing two optical elements where the respective ridge lines are substantially orthogonal and result in the reflection order produced by the apparatus of claims 11, 14, and 15.

Since independent claims 11, 14, and 15 each contain optical elements having respective ridge lines that are substantially orthogonal and have distinctive reflection orders, as discussed above, *Du* in view of *Sasser* fails to show, teach or suggest elements of independent claims 11, 14, and 15. Therefore, *Du* in view of *Sasser* fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 to show, teach, or suggest the elements of independent claims 11, 14, and 15.

Since claims 12, 13, 28, and 29 each depend directly or indirectly from independent claim 11, and *Du* in view of *Sasser* fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 in regards to independent claim 11, *Du* in view of *Sasser* likewise fails to satisfy the *prima facie* requirement under 35 U.S.C. § 103 for dependent claims 12, 28, and 29 for the same reasons as for independent claim 11.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection of claims 11, 12, 13, 14, 15, 28, and 29 under 35 U.S.C § 103(a).

Conclusion

In view of the above amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the formal objections and rejections to the claims, and the rejections based on prior art. Because all claims are believed to define over prior art of record, Applicants respectfully request an early indication of allowability.

If the Examiner has any questions concerning this application, the Examiner is requested to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayments to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 

Michael R. Mutter

Reg. No. 29,680

^{SPK}
MKM/JPK/kdb/gf

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

MARKED UP VERSION TO SHOW CHANGES MADE**IN THE SPECIFICATION:**

Please replace the paragraph beginning on page 36, line 23 with the following rewritten paragraph:

--FIG. 25 is a schematic perspective view showing a self-compensating laser resonator according to Embodiment 20 of the present invention. In FIG. 25, roof prisms 131, 138 are the same as those described in Embodiment 18. The roof prism 131 according to the present embodiment has a two-sided reflecting surface 139, on which a laser beam is incident, at a portion where the incident surface 131a and the optical path L4 intersect. The two-sided reflecting surface 139 reflects a laser beam at a front surface and a rear surface thereof.--

Please replace the paragraph beginning on page 37, line 4 with the following rewritten paragraph:

--Next, the operation will be explained. After passing through the laser medium 23 and being amplified, a laser beam traveling from the laser medium 23 toward a reflecting surface 138b enters an incident surface 138a and is successively reflected by the reflecting surface 138b and a reflecting surface 138c to travel in the opposite direction along an optical path L2 which is parallel to an optical path L1. The laser beam traveling along the optical path L2 enters an incident surface 131a and is successively reflected by a reflecting surface 131b and a reflecting surface 131c to travel in the direction opposite the optical path L2 along an optical path L3 which is parallel to the optical path L2. The laser beam traveling along the optical path L3 is successively reflected by the reflecting surface 138b and the reflecting surface 138a to travel in the direction opposite the optical path L3 along an optical path L4 which is parallel to the optical path L3. The laser beam traveling along the optical path L4 is reflected by the two-sided reflecting surface 139. That is to say, the laser beam is reflected in the opposite direction of the incident laser beam, travels along the optical paths L4, L3, L2 and L1 to again enter the laser medium 23.--

Please replace the paragraph beginning on page 37, line 18 with the following rewritten paragraph:

--Furthermore, after entering and passing through the laser medium 23 again, and being further amplified, the laser beam enters the incident surface 131a and is successively reflected by the reflecting surface 131b and the reflecting surface 131c. The laser beam is then reflected by the two-sided reflecting surface 139 in opposite direction of the incident laser so as to be confined and amplified in the laser resonator.--

Please replace the paragraph beginning on page 38, line 6 with the following rewritten paragraph:

--Moreover, although in the above embodiment the two sided reflecting surface 139 is provided at a portion where the incident surface 131a and the optical path L4 intersect, the two-sided reflecting surface 139 may be provided at any intersection between the optical paths L1 to L4 and the incident surfaces 131a and 132b. Furthermore, although the roof prisms 131, 138 used are those described in Embodiment 18, the roof prisms described in Embodiment 19, wherein the portions in the vicinity of the ridges are removed, may also be used.--

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A self-compensating laser resonator comprising:
a first reflecting apparatus ~~comprising~~ having a first reflecting surface and
a second reflecting surface disposed at a right angle to each other;
a second reflecting apparatus ~~facing the first reflecting apparatus and~~
~~comprising~~ having a third reflecting surface and a fourth reflecting surface
disposed at a right angle to each other, said second reflecting apparatus facing
said first reflecting apparatus such that the first through fourth reflecting surfaces
are facing each other; and
a laser medium provided between said first reflecting surface and said
third reflecting surface; and
a light source for exciting said laser medium[,], wherein[,], a ~~second-first~~
ridge line formed by ~~two planes comprising~~ the intersection of said ~~third-first~~ and
~~fourth-second~~ reflecting surfaces, is substantially orthogonal to a ~~first-second~~
ridge line formed by ~~two planes comprising~~ the intersection of said ~~first-third~~ and
~~second-fourth~~ reflecting surfaces, ~~characterized in that, where~~ a laser beam
emanating from said laser medium ~~and traveling toward~~ travels along an optical
path to said first reflecting surface and is successively ~~reflecting-reflected~~, along
an optical path, by said first, second, third, fourth, second, first, fourth and third
reflecting surfaces to again enter said laser medium.

2. (Amended) A self-compensating laser resonator according to Claim 1
~~characterized in that,~~ having an isolator, which allows a said laser beam to pass
~~there through~~ in only one direction, is provided in an optical path of said laser
beam.

3. (Amended) A self-compensating laser resonator according to Claim 1,
~~characterized in that~~ wherein a partially reflective mirror used for laser output is
provided at any one of said first to fourth reflecting surfaces.

4. (Amended) A self-compensating laser resonator according to Claim 1 ~~characterized in that wherein said laser beam contains a P-polarization and an S-polarization component, said resonator further having a polarizing reflecting means-element for selectively allowing to pass there-through to be output a first portion of said P-polarization component and a second portion of said S-polarization component, where the non-passed portions are reflected, to an outside portion any one of a P polarization component and a S polarization component of a laser beam while reflecting said other component is provided said polarization element positioned at any one of said first to fourth reflecting surfaces, and~~

further having a polarization component adjusting means-device for dividing said laser beam ~~relative to said polarizing reflecting means-into said P polarization component and said S polarization component at an arbitrary ratio, is provided said polarization adjusting device positioned in an optical path of said laser beam.~~

6. (Amended) A self-compensating laser resonator according to Claim 1, ~~characterized in that having, an isolator, for passing a allowing said laser beam having a P-polarization component and a S-polarization component, there-through to pass in only one direction, said isolator comprising having two polarization component adjusting means-devices for selectively allowing to pass there-through a first portion of said any one of a P-polarization component and an a second portion of said S-polarization component of a laser beam while reflecting said other component to be output to an outside portion the non-passed portions, a Faraday rotator and a half wave plate; and,~~

a polarization component adjusting means-device for dividing said laser beam ~~relative to said polarizing reflecting means-into said P-polarization component and said S-polarization component at an arbitrary ratio-is provided.~~

7. (Amended) A self-compensating laser resonator according to Claims 4 characterized in that, where said polarization component adjusting means ~~device~~ is a half wave plate.

8. (Amended) A self-compensating laser resonator according to Claims 4 characterized in that, where said polarization component adjusting means ~~device~~ is a birefringent optical element capable of achieving a birefringence effect in accordance with an applied voltage.

9. (Amended) A self-compensating laser resonator according to Claims 4, characterized in that having, a Seeder light generating apparatus for making Seeder light incident in ~~an optical path of a laser beam reflected from upon~~ said polarization reflecting means ~~is provided~~ element, where said seeder light is reflected onto an optional path of said laser beam.

11. (Amended) A self-compensating laser resonator comprising:
 a first reflecting apparatus having a first reflecting surface and a second reflecting surface disposed at a right angle to each other;
 a second reflecting apparatus ~~facing said first reflecting apparatus and~~ having a third reflecting surface and a fourth reflecting surface disposed at a right angle to each other, said second reflecting apparatus facing said first reflecting apparatus such that the first through fourth reflecting surfaces are facing each other;
 a third reflecting apparatus provided between said second and fourth reflecting surfaces, having a fifth reflecting surface and a sixth reflecting surface disposed parallel to, and facing away from, each other;
 a laser medium provided between said first and third reflecting surfaces;
 and a light source for exciting said laser medium, wherein,
a second-first ridge line formed by the intersection of two planes comprising said third-first and fourth-second reflecting surfaces is on a plane and being substantially orthogonal to a first-second ridge line formed by two planes

~~comprising the intersection of said first third and second fourth~~ reflecting surfaces, ~~characterized in that where~~ a laser beam emanating from said laser medium ~~and traveling toward~~ travels along an optical path to said first reflecting surface and is successively reflected, along an optical path, by said first, second, third, fourth, fifth, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, and is further successively reflected by said third, fourth, first, second, sixth, second, first, fourth, and third reflecting surfaces to once again enter said laser medium.

12. (Amended) A self-compensating laser resonator according to Claim 11 ~~characterized in that, wherein~~ said third ~~party~~ reflecting apparatus comprises two ~~single-sided reflecting mirrors, each having a single reflective surface,~~ mutually fixed by a holder and disposed such that the reflecting surfaces thereof are parallel and face in opposite directions from each other.

13. (Amended) A self-compensating laser resonator according to Claim 11, ~~characterized in that, wherein~~ said third reflecting apparatus comprises a reflecting mirror having a two-sided reflective layer ~~reflecting surface on one surface thereof for reflecting a laser beam with a front surface and a rear surface.~~

14. (Amended) a self-compensating laser resonator comprising:
 a first reflecting apparatus having a first reflecting surface and a second reflecting surface disposed at a right angle to each other;
 a second reflecting apparatus ~~facing said first reflecting apparatus and~~ having a third reflecting surface and a fourth reflecting surface disposed at a right angle to each other, said second reflecting apparatus facing said first reflecting apparatus such that the first through fourth reflecting surfaces are facing each other;

a laser medium having a seventh two-sided reflecting surface on an optical axis of a said laser beam ~~on one end surface thereof provided between~~ said first and third reflecting surface; and

and a light source for exciting said laser medium, wherein,
 a ~~second-first~~ ridge line formed by ~~two planes comprising the intersection~~ of said ~~third-first~~ and ~~fourth-second~~ reflecting surfaces, is on a plane and being substantially orthogonal to a ~~first-second~~ ridge line formed by ~~two planes comprising the intersection of~~ said ~~first-third~~ and ~~second-fourth~~ reflecting surfaces, characterized in that, ~~where~~ a laser beam emanating from said laser medium and ~~traveling toward~~ travels along an optical path to said first reflecting surface and is successively reflected, along an optical path, by said first, second, third, fourth, second, first, fourth, third and seventh two-sided reflecting surfaces, is further successively reflected by said third, fourth, first, second, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium and is reflected by said seventh two-sided reflecting surface.

15. (Amended) A self-compensating laser resonator comprising:
- a first reflecting apparatus having a first reflecting surface and a second reflecting surface disposed at a right angle to each other;
 - a second reflecting apparatus ~~facing said first reflecting apparatus and~~ having a third reflecting surface and a fourth reflecting surface disposed at a right angle to each other, said second reflecting apparatus facing said first reflecting apparatus such that the first through fourth reflecting surfaces are facing each other;
 - a laser medium provided between said first and third reflecting surfaces;
 - a light source for exciting said laser medium; and
 - ~~and~~ an optical component having an eighth two-sided reflecting surface on an optical axis of a said laser beam on one end surface thereof provided between second and fourth reflecting surfaces, wherein
 - a ~~second-first~~ ridge line formed by ~~two planes comprising the intersection of~~ said ~~third-first~~ and ~~fourth-second~~ reflecting surfaces, is on a plane and being substantially orthogonal to a ~~first-second~~ ridge line formed by ~~two planes the intersection of comprising~~ said ~~first-third~~ and ~~second-fourth~~ reflecting surfaces,

~~characterized in that~~where a laser beam emanating from said laser medium and ~~traveling toward~~travels along an optical path to said first reflecting surfaces and is successively reflected, along an optical path, by said first, second, third, fourth, eighth two-sided, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, is further successively reflected, along an optical path, by said third, fourth, first and second reflecting surfaces to be incident on said optical component, and is further successively reflected, along an optical path, by said eighth two-sided, second, first, fourth, and third reflecting surfaces to once again enter the laser medium.

16. (Amended) A self-compensating laser resonator according to Claim 1, ~~characterized in that~~wherein said first and second reflecting apparatuses each have two flat reflecting mirrors disposed at a right angle to each other.

17. (Amended) A self-compensating laser resonator according to Claim 16 ~~characterized in that~~wherein said two flat reflecting mirrors disposed at a right angle to each other are disposed with a gap therebetween and are joined to one another by means of a joining member.

18. (Amended) A self-compensating laser resonator according to Claim 1, ~~characterized in that~~wherein

said first reflecting apparatus and second reflecting apparatus each comprise a prism having two reflecting surfaces disposed at right angles to each other and an incident surface of the laser beam.

19. (Amended) A self-compensating laser resonator comprising:
 a first prism having first and second reflecting surfaces disposed at right angles to each other and a first incident surface on said first prism, upon which said laser beam is incident~~of the laser beam~~;
 a second prism ~~facing said first prism and~~ having third and fourth reflecting surfaces disposed at right angles to each other and a second incident surface,

upon which said laser beam is incident~~of the laser beam on said second prism~~
where the first through fourth reflecting surfaces face each other, and comprising
 a ninth two-sided reflecting surface on an optical path of the laser beam, incident
where said ninth two-sided reflecting surface is on the second incident surface;

a laser medium provided between said first and third reflecting surface;

and a light source for exciting said laser medium, wherein,

a second-ridge line formed by two planes comprising the intersection of
 said thirdfirst and fourthsecond reflecting surfaces, is on a plane and being
 substantially orthogonal to a first-second ridge line formed by two planes
comprising the intersection of said firstthird and secondfourth reflecting surfaces,
 characterized in that, where a laser beam emanating from the laser medium and
~~traveling toward~~ travels along an optical path to said first reflecting surface and is
 successively reflected, along an optical path by the first, second, third, fourth,
 second, first, ninth two-sided, first, second, fourth, third, second, and first
 reflecting surfaces to again enter the laser medium, passes through the laser
 medium, and is further successively reflected along an optical path by the third,
 fourth, ninth two-sided, fourth and third reflecting surfaces to once again enter
 the laser medium.

20. (Amended) A self-compensating laser resonator according to Claim 18
 characterized in that,

said first and second ridges lines of the first and second prisms are
 eliminated.

21. (Amended) A self-compensating laser resonator according to claim 19
~~characterized in that,~~ wherein said first and second ridges lines of the first and
 second prisms are eliminated.

22. (Once Amended) A self-compensating laser resonator according to ~~claim 5~~claim 4 characterized in that, said polarization component adjusting ~~means~~device is a half wave plate.

23. (Once Amended) A self-compensating laser resonator according to claim 6 characterized in that, said polarization component adjusting ~~means~~device is a half wave plate.

24. (Once Amended) A self-compensating laser resonator according to claim ~~54~~ characterized in that, said polarization component adjusting ~~means~~device is a birefringent optical element capable of achieving a birefringence effect in accordance with an applied voltage.

25. (Once Amended) A self-compensating laser resonator according to claim 6 characterized in that, said polarization component adjusting ~~means~~device is a birefringent effect in accordance with an applied voltage.

26. (Once Amended) A self-compensating laser resonator according to claim ~~54~~ characterized in that, a seeder light generating apparatus for making seeder light incident in ~~an~~the optical path of a laser beam reflected from said polarization reflecting ~~means~~element is provided.

27. (Once Amended) A self-compensating laser resonator according to claim 6 characterized in that, a seeder light generating apparatus for making seeder light incident in ~~an~~the optical path of a laser beam reflected from said polarization reflecting ~~means~~element is provided.